REMARKS

Claim 1 is amended to correct a grammatical error of a self-evident nature. The original claim included the clause "each of said classes having corresponding formats ..." The pronoun "each" is singular, and properly requires a singular direct object. That is, "each ... having corresponding formats" is grammatically incorrect; "each ... having a corresponding format" is proper.[1] The prepositional phrase, "in different respective positions," is similarly corrected to its proper singular form, "in a different respective position." These amendments are purely grammatical in nature, and are made to conform the claim to the rules of English grammar and to avoid number ambiguity. The amendments are not made for any reason of patentability, do not alter the scope of the claim in any way, and require no new search or consideration by the Examiner.

The Examiner has maintained the rejection of claim 1 under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 5,710,772 to Sato, stating that Applicant's arguments are directed to features not recited in the claim. This is erroneous; the plain language of claim 1 requires a known bit pattern be located in different respective portions in a data frame for each different class, without recourse to any teaching in the specification. As Applicant demonstrated, Sato does not teach or suggest this limitation, and thus cannot anticipate claim 1. The preamble of claim 1 recites:

> A method of classifying a received data frame as belonging to one of a plurality of possible classes, each of said classes having a corresponding format wherein a known bit pattern is located in a different respective position within said data frame, said method comprising:

The preamble recites a plurality of classes, *i.e.*, more than one class. Each such class has a corresponding format. That is, claim 1 recites a one-to-one correlation between each

[1] The plural "classes" is the subject of the prepositional phrase "of said classes," which properly modifies the singular pronoun "each."

class and a format. By way of non-limiting example, if there are three classes, there must be three formats, each format corresponding to a class: class 1 – format 1; class2 – format 2; and class 3 – format 3.

The clause "wherein a known bit pattern is located in a different respective position within said data frame" modifies the noun "format." It defines one aspect of the format. Thus, for each format, a known bit pattern is in a different respective bit position in the data frame. Since there is a one-to-one correspondence between each format and each class, each class therefore necessarily has a known bit pattern in a different respective bit position. "Respective" obviously refers to the bit positions being different from format to format, and hence from class to class.

Thus, by straightforward construction of the plain language of claim 1 – without resort to the specification and without importing any limitation from the specification into the claim – claim 1 recites a plurality of classes, with each class having a corresponding format wherein a known bit position occupies a different position in the data frame, relative to the other formats (and hence the other classes). In other words, each class has a known bit pattern in a different bit position from any other class. Hence the Examiner's assertion, "the features upon which applicant relies (i.e., the claim requires different respective positions for different classes) are not recited in the rejected claim(s)," is clearly erroneous. Claim 1 recites precisely that – that in each class, a known bit pattern is in a different bit position than from any other class.

Applicant notes that this construction does not depend on the amendments to claim 1. One of skill in the art would construe "each of said classes having corresponding formats" as defining the same one-to-one relation ship between a class and a format, in spite of the incorrect grammatical construction of that clause. Thus, even if the Examiner does not enter the amendments, claim 1 still defines a plurality of classes wherein each class has a known bit pattern in a different bit position in a data frame than any other class.

As thoroughly explained in Applicant's Response to the Final Office Action, Soto shows precisely the opposite – in Soto's case 1, case 2, and case 3 (which the Examiner relies on as anticipating the plurality of classes in claim 1), both the SYNC(1) and SYNC(2) bit patterns are necessarily in the same bit position in the frame. See Fig. 5. The three cases on which the Examiner relies flow from decision block S206. This point of the flowchart can only be reached by taking the "68bit" path from decision block S202. The "68bit" data frame structure is depicted in Fig. 1(c). Since all of cases 1, 2, and 3 must be of the "68bit" format, and that format is depicted in Fig. 1(c) with SYNC(1) and SYNC(2) in known bit positions within the data frame, the known bit patterns of the different cases are not in different relative bit positions, as recited in claim 1. For at least the reason that Soto fails to disclose two or more classes with corresponding formats wherein a known bit pattern is located in different relative bit positions, the § 102 rejection of claim 1 must be withdrawn.

The Examiner further asserts that "classifying said frame as belonging to a first class or a second class based on said first value [calculated by correlating a known bit pattern to a first bit position]" is anticipated by Soto, "wherein the relation between the SYNC(1) and SYNC(2) determines the classes (presen[ce] or absence of speech)." Office Action of February 8, 2005, page 3.

First, the Examiner here equates the "classes" of claim 1 to the presence or absence of speech. This is inconsistent with the Examiner's previously stated position that the classes of claim 1 are anticipated by Soto's case 1, case 2, and case 3 of Fig. 5. To anticipate a claim under § 102, each and every element of claim must be disclosed in a single prior art reference, "arranged as in the claim." *Lewmar Marine, Inc. v. Barient, Inc.*, 827 F.2d 744, 3 USPQ2d 1766 (Fed. Cir. 1987). "These elements must be arranged as in the claim under review." *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). There is no indication that "a first class" and "a second class" recited in the "classifying" step of claim 1 are any different types of "classes" than those recited in the preamble. The Examiner may not show anticipation of the two

instances of "class" by reference to entirely different concepts in the prior art (*e.g.*, cases 1, 2, and 3 of Fig. 5, *vs.* the "class" of the presence or absence of speech in a data frame).

However, in spite of this fatal inconsistency, the Examiner is simply erroneous in the above assertion. In Soto, the relation between the SYNC(1) and SYNC(2) does not determine the presence or absence of speech – that determination is made solely on the basis of frame length. Col. 6, lines 14-23. Thus, the Examiner has failed to articulate any disclosure in the prior art that anticipates the claimed method step, "classifying said frame as belonging to a first class or a second class based on said first value." For at least this reason, the § 102 rejection of claim 1 must be withdrawn.

For the forgoing reasons, it is respectfully urged that the present application is in condition for allowance and notice to such effect is respectfully requested.

Respectfully submitted,

COATS & BENNETT, P.L.L.C.

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Edward H. Green, III
Registration No.: 42,604

P.O. Box 5
Raleigh, NC 27602
Telephone: (919) 854-1844
Facsimile: (919) 854-2084